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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,021	04/17/2006	Kenji Mizushima	27347U	9314
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EXAMINER CURTIS III, CHARLES G				
ART UNIT		PAPER NUMBER		
4172				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/576,021

**Applicant(s)**

MIZUSHIMA ET AL.

**Examiner**

CHARLES G. CURTIS III

**Art Unit**

4172

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CIS)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 04/17/2006

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities: Paragraph [0041] contains the grammatical error "a surface side f the door handle."

Appropriate correction is required.

### *Claim Objections*

2. **Claim 1** objected to because of the following informalities: "followings" is a grammatical error and should be "following." Appropriate correction is required.

### *Claim Rejections - 35 USC § 101*

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claims 6-9** rejected under 35 U.S.C. 101 because the disclosed inventions are inoperative and therefore lack utility.

Regarding claims 6-9, the limitation "plastic antenna" renders the inventions inoperative because plastic is not an electrical conductor, and therefore the antenna would not function.

Further regarding claims 7-8, the limitation "plastic magnetic body" renders the inventions inoperative because plastic is a diamagnetic material and therefore would not function with the antenna as intended.

### *Claim Rejections - 35 USC § 112*

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 6-9** rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 6-9, each claim includes the term "an engagement gear." This term is indefinite because the specification does not clearly define the term.

Further regarding claims 7-8, the term "flexible base" is indefinite because the specification does not clearly define the term. Claim 7 reads such that the antenna's flexible base covers the whole of the grip, whereas the specification and drawings show the antenna contained within the grip/handle. For purposes of examination, Examiner will interpret the phrase "a flexible base for covering the grip" to mean a flexible base united with the antenna that mates with the grip.

#### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. **Claims 6 and 9** rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Application Publication No. 2003/0063037 (March et al.).

Regarding claim 6, March discloses a door handle, comprising:

- a grip for operating a door (Paragraph [0041]);
- a plastic antenna (Element 13, see Figures 3 & 5 and Paragraph [0039]; it is plastic in that it is contained within a door handle which is plastic, as detailed in Paragraphs [0046]-[0048]) communicating with a portable device for operating a lock gear of the door (Paragraph [0039]); and
- an engagement gear for engaging the grip with the plastic antenna (the antenna can be sealed within the handle/grip, Paragraph [0046]).

Regarding claim 9, March discloses a keyless entry system, comprising:

- a door handle for operating a door (Paragraphs [0039] and [0041]);
- a lock gear for locking the door (Paragraphs [0039] and [0041]); and
- a controller for operating the lock gear, the controller including:
  - a portable device (Paragraph [0039]),
  - a plastic antenna communicating with the portable device (Element 13, see Figures 3 & 5 and Paragraph [0039]; it is plastic in that it is contained within a door handle which is plastic, as detailed in Paragraphs [0046]-[0048]), and
  - an engagement gear for engaging the antenna with the door handle (the antenna can be sealed within the door handle, Paragraph [0046]).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. **Claims 1-5 and 7-8** rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication No. 2003/0063037 (March et al.) in view of US Patent Application Publication No. 2003/0122725 (Ieda et al.).

Regarding claim 1, March discloses a door opener-closer, comprising:

- a door handle (Element 10, see Figures 1-2 and Paragraph [0039]);
- a flexible antenna (Element 14, see Figures 3 and 5; it is flexible in that it is formed to fit in the handle body as explained in Paragraphs [0046]-[0048]) received in the door handle and serving as a transmitter-receiver communicating with a portable device (Paragraph [0039]);
- a handle body (the base portion, Element 13, see Figure 2 and Paragraph [0041]) having a backface side formed with a cover receiver (the base portion mates with the handle portion so that the handle portion can pivot away from the base, Paragraph [0041]);

- a cover handle (Element 12, see Figures 1 and 4-5 and Paragraph [0039]) united with the antenna and made of a plastic resin (Paragraph [0042]), the cover handle mating with the cover receiver in such a manner as to be held by the cover receiver (Paragraphs [0041]); and
- a sensor for sensing at least one of the following which are implemented by an operator carrying the portable device: approaching a door, contacting the door, and operating the door, to thereby allow the transmitter-receiver and the portable device to communicate with each other, thus locking or unlocking the door (see Paragraph [0067] regarding the sensor itself, and Paragraph [0039] regarding locking/unlocking the door).

March does not expressly disclose that the antenna includes a magnetic body core made of a soft magnetic body.

However, the preceding limitation is known in the art of communications. Ieda discloses an antenna device located inside of a vehicle door handle wherein the antenna includes a ferrite core, which is a soft magnetic material (Paragraph [0025]). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the invention disclosed in March with the addition of using the particular antenna disclosed in Ieda as the suggestion lies in March that the antenna may be any known antenna means or device, (Paragraph [0040]), such as a bobbin-type antenna with a ferrite core as disclosed in Ieda, which is a well-known, readily available component.

Regarding claim 2, March in view of Ieda discloses the door opener-closer of claim 1 as discussed above. March further discloses that the cover handle has a first end side and a second end side respectively provided with a first engagement protrusion and a second engagement protrusion, the cover receiver has a first end side and a second end side respectively provided with a first engagement and a second engagement, and the first engagement protrusion and the second engagement protrusion are respectively engageable with the first engagement and the second engagement (Paragraphs [0041] and [0045]).

Regarding claim 3, March in view of Ieda discloses the door opener-closer of claim 1 as discussed above. March further discloses that the sensor is united with the antenna (the sensor may be contained within the handle portion along with the antenna, Paragraph [0067]).

Regarding claim 4, March in view of Ieda discloses the door opener-closer of claim 2 as discussed above. March further discloses that the sensor is united with the antenna (the sensor may be contained within the handle portion along with the antenna, Paragraph [0067]).

Regarding claim 5, March in view of Ieda discloses the door opener-closer of claim 1 as discussed above. March further discloses that the door handle is applied to an outside door handle device for a vehicle (Paragraph [0007]).

Regarding claim 7, March discloses the door handle of claim 6 as discussed above. March further discloses that the antenna includes a flexible base for covering



the grip (Paragraphs [0041]-[0042] and [0046]). March does not disclose that the antenna includes a plastic magnetic body united with the flexible base.

However, the preceding limitation is known in the art of communications. Ieda discloses an antenna device located inside of a vehicle door handle wherein the antenna includes a ferrite core (Paragraph [0025]). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the invention disclosed in March with the addition of using the particular antenna disclosed in Ieda as the suggestion lies in March that the antenna may be any known antenna means or device, (Paragraph [0040]), such as a bobbin-type antenna with a ferrite core as disclosed in Ieda, which is a well-known, readily available component.

Regarding claim 8, March in view of Ieda discloses the door handle of claim 7 as discussed above. March further discloses that the antenna includes a protrusion extending from the flexible base, and that the grip includes a nail extending towards the door and engaged with the protrusion (Paragraph [0029] of Applicant's specification states that each engagement serves as a nail, and that the engagements protrusions of the base mate with the engagement of the handle/grip. In March, the handle portion mates with the base via a leg as described in Paragraph [0045]).

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES G. CURTIS III whose telephone number is (571)270-7493. The examiner can normally be reached on Monday - Friday 7:30 AM - 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis West can be reached on (571)272-7859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHARLES G CURTIS III/  
Examiner, Art Unit 4172  
/Jean A Gelin/  
Primary Examiner, Art Unit 2617  
March 3, 2009